Welcome to STN International! Enter x:x

LOGINID: ssptajxh1654

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
      1
                 Web Page URLs for STN Seminar Schedule - N. America
                 "Ask CAS" for self-help around the clock
NEWS
      2
NEWS
         OCT 23
                 The Derwent World Patents Index suite of databases on STN
                 has been enhanced and reloaded
NEWS
      4
         OCT 30
                 CHEMLIST enhanced with new search and display field
NEWS
      5
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
NEWS
      6
         NOV 10
                 CA/CAplus F-Term thesaurus enhanced
NEWS
      7
         NOV 10
                 STN Express with Discover! free maintenance release Version
                 8.01c now available
NEWS
      8
         NOV 20
                 CAS Registry Number crossover limit increased to 300,000 in
                 additional databases
NEWS
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                 to 50,000
NEWS 10
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
         DEC 11
NEWS 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 12
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 13
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
NEWS 14
         DEC 18
                 CA/CAplus pre-1967 chemical substance index entries enhanced
                 with preparation role
NEWS 15
         DEC 18
                 CA/CAplus patent kind codes updated
NEWS 16
         DEC 18
                 MARPAT to CA/CAplus accession number crossover limit increased
                 to 50,000
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
NEWS 17
                 CA/CAplus enhanced with more pre-1907 records
NEWS 18
         DEC 27
NEWS 19
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP)
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
NEWS X25
              X.25 communication option no longer available
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 07:58:16 ON 09 JAN 2007

ENTER COST CENTER (NONE): none

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 07:58:30 ON 09 JAN 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 JAN 2007 HIGHEST RN 916971-64-7 DICTIONARY FILE UPDATES: 8 JAN 2007 HIGHEST RN 916971-64-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> s S-[2,3-bis(acyloxy)-(2S)-propyl]L-cysteinylcarboxypolyethyleneglycol MISSING OPERATOR 'S-[2,3-BIS(ACYLOXY'

=> s S-[2,3-bis(acyloxy)-(2S)-propyl]
MISSING OPERATOR 'S-[2,3-BIS(ACYLOXY'

=> s bisacyloxypropylcysteine

0 BISACYLOXYPROPYLCYSTEINE

L1

0 BISACYLOXYPROPYLCYSTEINE

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 5.85 6.06

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 07:59:51 ON 09 JAN 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE LAST UPDATED: 8 Jan 2007 (20070108/ED)

CA 2489010

IPCI

A61K0047-48 [ICM, 7]

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s bisacyloxypropylcysteine
              1 BISACYLOXYPROPYLCYSTEINE
              1 BISACYLOXYPROPYLCYSTEINES
L2
              1 BISACYLOXYPROPYLCYSTEINE
                   (BISACYLOXYPROPYLCYSTEINE OR BISACYLOXYPROPYLCYSTEINES)
=> d all
     ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
L2
AN
     2004:55397 HCAPLUS
DN
     140:105268
ED
     Entered STN: 22 Jan 2004
     Macrophage-stimulating bisacyloxypropylcysteine conjugates and
TI
     therapeutic use thereof
IN
     Muehlradt, Peter F.; Morr, Michael
PA
     GBF Gesellschaft fuer Biotechnologische Forschung MbH, Germany
SO
     Eur. Pat. Appl., 13 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     German
IC
     ICM A61K047-48
     1-7 (Pharmacology)
      Section cross-reference(s): 34
FAN.CNT 1
                                               APPLICATION NO.
     PATENT NO.
                            KIND
                                    DATE
                                                                           DATE
      -----
                                                 -----
                                               EP 2002-16066
                                    20040121
PΤ
     EP 1382352
                            A1
                                                                           20020719
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     CA 2489010
                            A1
                                    20040129
                                                CA 2003-2489010
                                                                           20030718
     WO 2004009125
                             A2
                                    20040129
                                                 WO 2003-EP7892
                                                                           20030718
     WO 2004009125
                                    20040527
                            A3
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
              PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
              TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003251002
                             A1
                                    20040209
                                               AU 2003-251002
                                                                           20030718
     EP 1521600
                            A2
                                    20050413
                                                EP 2003-765055
                                                                          20030718
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                                 US 2005-521013
     US 2006134061
                             A1
                                    20060622
                                                                           20050913
PRAI EP 2002-16066
                             Α
                                    20020719
     WO 2003-EP7892
                             W
                                    20030718
CLASS
 PATENT NO.
                   CLASS PATENT FAMILY CLASSIFICATION CODES
 -----
                  ----
                           EP 1382352
                   ICM
                          A61K047-48
                   IPCI
                          A61K0047-48 [ICM, 7]
                          A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                   IPCR
                           A61K047/48H4P
                   ECLA
```

```
IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCI
 WO 2004009125
                        A61K0047-48 [ICM, 7]
                 IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 ECLA
                        A61K047/48H4P
AU 2003251002
                 IPCI
                        A61K0047-48 [ICM, 7]
                 IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCI
                        A61K0047-48 [ICM, 7]
 EP 1521600
                 IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCI
                        A61K0038-17 [I,A]; A61K0031-737 [I,A]; A61K0038-16
 US 2006134061
                        [I,A]; C07K0014-47 [I,A]; C07K0014-435 [I,C*]
                        424/078.270; 514/002.000; 514/054.000; 525/054.100;
                 NCL
                        530/409.000; 536/053.000
                 ECLA
                        A61K047/48H4P
os
    MARPAT 140:105268
AB
    The invention discloses bisacyloxypropylcysteine conjugates
    R2C(0)OCH[R1C(0)OCH2]CH2SCH(NH2)C(0)YR3 (R1, R2 = fatty acid group; Y =
    NH, O, S, OCO; R3 = conjugate group, especially a polymer). Conjugates of the
     invention include e.g. S-[2,3-bis(palmitoyloxy)-(2S)-propyl]-L-cysteinyl-
     carboxy-polyethylene glycol. The conjugates of the invention show good
    macrophage-stimulating activity and need no other solubilizers. They are
    useful for numerous applications, particularly for macrophage stimulation,
     stimulation of antibody production, as a defense against infection, as
     immunostimulants, particularly in relation to tumors, for the prevention
     and treatment of septic shock, for wound healing, and as adjuvants for
     vaccines.
ST
    bisacyloxypropylcysteine polymer conjugate macrophage
     stimulation; immunostimulant antiinfective antitumor
    bisacyloxypropylcysteine polymer conjugate; wound healing vaccine
     adjuvant bisacyloxypropylcysteine polymer conjugate; septic
     shock treatment bisacyloxypropylcysteine polymer conjugate; PEG
    bisacyloxypropylcysteine conjugate prepn macrophage stimulation
IT
     Vaccines
        (adjuvants for; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
     Immunostimulants
IT
        (adjuvants; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
TΤ
     Collagens, biological studies
     Polyoxyalkylenes, biological studies
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates with bisacyloxypropylcysteines;
        macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     Polymers, biological studies
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates, with bisacyloxypropylcysteines;
        macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
    Drug delivery systems
        (inhalants; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Drug delivery systems
        (injections; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
ΙT
    Anti-infective agents
     Antitumor agents
    Drug delivery systems
     Immunostimulants
     Infection
    Neoplasm
     Wound
     Wound healing promoters
```

```
(macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     Drug delivery systems
        (nasal; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
     Antibodies and Immunoglobulins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (production; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
     Shock (circulatory collapse)
        (septic; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
     Macrophage
        (stimulation; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
     Drug delivery systems
IT
        (topical; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
     Glycoconjugates
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (with bisacyloxypropylcysteines; macrophage-stimulating
        bisacyloxypropylcysteine conjugates and therapeutic use)
IT
     647013-57-8
     RL: PAC (Pharmacological activity); BIOL (Biological study)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     647013-56-7P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
     52-90-4D, Cysteine, bisacyloxypropyl derivs., conjugates
                                                                 9000-69-5D,
IT
     Pectin, conjugates with bisacyloxypropylcysteines
     conjugates with bisacyloxypropylcysteines
                                                 9003-39-8D,
     Polyvinylpyrrolidone, conjugates with bisacyloxypropylcysteines
     9004-54-0D, Dextran, conjugates with bisacyloxypropylcysteines
     9005-32-7D, Alginic acid, conjugates with bisacyloxypropylcysteines**
           25322-68-3D, Polyethylene glycol, conjugates with
     ***bisacyloxypropylcysteines
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     24991-53-5
                  210532-98-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
RE.CNT
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; Handbook of pharmaceutical excipients
(2) Cox, G; WO 0042175 A 2000 HCAPLUS
(3) La Roche, H; EP 0510356 A 1992 HCAPLUS
(4) Takeda Chemical Industries Ltd; EP 0604945 A 1994 HCAPLUS
(5) Takeda Chemical Industries Ltd; EP 0604957 A 1994 HCAPLUS
(6) Takeda Chemical Industries Ltd; EP 0638588 A 1995 HCAPLUS
    SET SMA OFF
```

SET COMMAND COMPLETED

SEL RAN. HCAPLUS (4) L2 1

E1 THROUGH E1 ASSIGNED

=> SET SMA LOGIN

SET COMMAND COMPLETED

=> S E1

L3 1 "1995:546556"/AN

=> D L3 BIB, ABS

```
ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
L3
    1995:546556 HCAPLUS
AN
DN
    123:144635
    isolation of TAN-1511 compounds and preparation of some specific analogs
TI.
    as immunostimulants
    Tanida, Seiichi; Hida, Tsuneaki; Wakimasu, Mitsuhiro
IN
    Takeda Chemical Industries, Ltd., Japan
PΑ
SO
    Eur. Pat. Appl., 66 pp.
    CODEN: EPXXDW
DT
    Patent
    English
LA
FAN.CNT 3
    PATENT NO.
                                          APPLICATION NO.
                                                                 DATE
                        KIND
                               DATE
     ______
                        ----
                               _ _ _ _ _ _ _
                                          -----
                                          EP 1993-120952
                                                                 19931227
PΙ
    EP 604945
                        A1
                               19940706
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
    ZA 9309691
                               19950627
                                          ZA 1993-9691
                                                                 19931227
                        Α
                                          JP 1993-336883
                        Α
                               19950606
                                                                 19931228
    JP 07145084
```

19951226

19940629

19921228

19930809

US 1993-174365

CA 1993-2112522

19931228

19931229

Α

A1

Α

Α

$$\begin{array}{c} \text{OR}^2 \\ \text{H}_2\text{C} - \text{S} - \text{CH}_2\text{CHCH}_2\text{OR}^1 \\ \\ | \\ \text{R}^3\text{NHCHCO} + \text{Gly} + \text{X} - \text{OH} \\ \end{array}$$

US 5478809

CA 2112522

JP 1993-197579 MARPAT 123:144635

PRAI JP 1992-349062

OS GI

TAN-1511A, TAN-1511B, and TAN-1511C of formula I (no more information regarding specific individual structures given) having leukocyte-enhancing activity, were isolated from Streptosporangium. Moreover, specific analogs of TAN-1511 compds. [I; R1, R2, R3 = aliphatic acyl; X = amino acid sequence containing 1-5 amino acid residues which contains at least one acidic amino acid residue; n = 0-4 integer; provided that when n = 0, X = glutamylglycyl at its N-terminal and when n = 1 or 2, the acidic amino acid residue is an acidic amino acid residue other than D-glutamyl or a salt thereof], having leukocyte-enhancing activity, are prepared Thus, Pam-Dhc(Pam)2-Gly-Gly-Glu(OtBu)-Thr(tBu)-OtBu [Pam = n-hexadecanoyl, Dhc(Pam)2 = S-2,3-bis(hexadecanoyloxy)-(2S)-propyl-(R)-cysteine residue] (prepared via peptide coupling of Z-Gly-Gly-Gly-Glu(OtBu)-Thr(tBu)-Thr(tBu)-Otbu with Pam-Dhc(Pam)2-OH), was maintained at 20° for 1.5 h to give the title compound Pam-Dhc(Pam)2-Gly-Gly-Gly-

Glu-Thr-Thr-OH. The title compound (2R,6R)-2-Myr-amino-6,7-bis(PamO)-4-THT-Gly-Gly-Gly-Glu-Thr-Thr-OH [Myr = n-tetradecanoyl, THT = thiaheptanoyl] (also prepared) at 0.13 mg/Kg/day p.o. increased leukocyte number by 7% in a testing using female mice. Pharmaceutical compns. containing I are described.

10521013

INVENTOR SEARCH

CORPORATE SOURCE:

PUBLISHER:

=> d ibib abs ind hitstr 15 1-3

ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:3257 HCAPLUS Full-text

DOCUMENT NUMBER: 138:88605

TITLE:

Differential recognition of structural details of

bacterial lipopeptides by toll-like receptors

AUTHOR (S): Morr, Michael; Takeuchi, Osamu; Akira,

> Shizuo; Simon, Markus M.; Muhlradt, Peter F. Research Group Molecular Recognition of the

> Gesellschaft fur Biotechnologische Forschung,

Braunschweig, Germany

SOURCE: European Journal of Immunology (2002), 32(12),

3337-3347

CODEN: EJIMAF; ISSN: 0014-2980 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

AB The question which detailed structures of bacterial modulins determine their relative biol. activity and resp. host cell receptors was examined with synthetic variants of mycoplasmal lipopeptides as model compds., as well as recombinant outer surface protein A (OspA) of Borrelia burgdorferi and lipoteichoic acid. Mouse fibroblasts bearing genetic deletions of various toll-like receptors (TLR) were the indicator cells to study receptor requirements, primary macrophages served to measure dose response. following results were obtained: (i) the TLR system discriminates between modulins with three and those with two long-chain fatty acids in their lipid moiety, in that lipopeptides with three fatty acids were recognized by TLR2, whereas those with two long-chain fatty acids and lipoteichoic acid required the addnl. cooperation with TLR6; (ii) substitution of the free N terminus of mycoplasmal lipopeptides with an acetyl or palmitoyl group decreased the specific activity; (iii) removal of one or both ester-bound fatty acids lowered the specific activity by five orders of magnitude or deleted biol. activity; (iv) oxidation of the thioether group lowered the specific activity by at least four orders of magnitude. The implications of these findings for physiol. inactivation of lipopeptides and host-bacteria interactions in general are discussed.

CC 15-10 (Immunochemistry)

ST lipoteichoic acid bacteria lipopeptide toll like receptor

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (TLR (Toll-like receptor); recognition of bacterial lipopeptides by toll-like receptors)

IT Infection

> (bacterial; recognition of bacterial lipopeptides by toll-like receptors)

IT Fatty acids, biological studies

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (long-chain; recognition of bacterial lipopeptides by toll-like receptors)

ΙT Proteins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (ospA (outer surface protein A); recognition of bacterial lipopeptides by toll-like receptors)

IT Borrelia burgdorferi Macrophage

Structure-activity relationship

(recognition of bacterial lipopeptides by toll-like receptors)

IT Thioethers

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

IT 9041-38-7D, Teichoic acid, lipo- 219986-24-0 250718-44-6 , MALP 2 484648-56-8 484648-57-9

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

IT 219986-24-0 250718-44-6, MALP 2 484648-56-8

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

RN 219986-24-0 HCAPLUS

CN L-Threonine, S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-glutaminyl-L-threonyl-L-asparaginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 250718-44-6 HCAPLUS

CN L-Lysine, S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-Lasparaginyl-L-asparaginyl-L-α-aspartyl-L-α-glutamyl-L-seryl-Lasparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L-α-glutamyl(9CI) (CA INDEX NAME)

PAGE 1-A.

H2N

$$(CH_2)_4$$
 H_2
 H_2
 H_3
 H_4
 H_5
 H_4
 H_5
 H_4
 H_5
 H_4
 H_5
 H_4
 H_5
 H_5
 H_5
 H_4
 H_5
 H_5
 H_5
 H_6
 H_7
 H_8
 H_8

PAGE 1-B

PAGE 1-C

RN 484648-56-8 HCAPLUS

CN L-Lysine, N-acetyl-S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-asparaginyl-L-asparaginyl-L- α -aspartyl-L- α -glutamyl-L-seryl-L-asparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L- α -glutamyl- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

— (CH₂) 14

REFERENCE COUNT:

THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: ' 2002:829325 HCAPLUS Full-text

DOCUMENT NUMBER:

139.5262

TITLE:

The Mycoplasma-derived lipopeptide MALP-2 is a potent

mucosal adjuvant

AUTHOR(S):

Rharbaoui, Faiza; Drabner, Birgit; Borsutzky, Stefan;

Winckler, Urte; Morr, Michael; Ensoli,

Barbara; Muhlradt, Peter F.; Guzman, Carlos

Α.

CORPORATE SOURCE:

Vaccine Research Group, Division of Microbiology,

GBF-German Research Center for Biotechnology,

Braunschweig, D-38124, Germany

SOURCE: European Journal of Immunology (2002), 32(10),

2857-2865

CODEN: EJIMAF; ISSN: 0014-2980 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

PUBLISHER:

Journal

LANGUAGE: English

The adjuvanticity of MALP-2, a 2-kDa synthetic lipopeptide with macrophagestimulatory activity, was evaluated in BALB/c mice using β -galactosidase (β gal) as model antigen. When co-administered with β -gal by either the intranasal (i.n.) or i.p. route, MALP-2 (0.5 μ g) was capable of increasing β gal-specific serum IgG titers by 675-3560-fold (i.n.) and 64-128-fold (i.p.), resp., as compared to immunization with β -gal alone. Using MALP-2, almost maximal IgG responses were already stimulated following the first immunization, and the IgG titers were similar to those observed using 10 µg of cholera toxin B subunit (CTB) as adjuvant. The mucosal immune system was also effectively stimulated when MALP-2 was administered by the i.n. route (36% and 23% of β -gal-specific IgA in lung and vaginal lavages, resp.). The i.n. coadministration of MALP-2 stimulated a stronger cellular immune response than CTB, both in submandibular lymph nodes and spleen. The anal. of β -galspecific IgG isotypes and the profiles of cytokines secreted by in vitro restimulated cells showed that co-administration of MALP-2 triggered a dominant Th2-response pattern. A recruitment of B220+ and MAC-1+ cells with an upregulated expression of MHC class I, CD80 (B7.1) and CD54 (ICAM-1) was observed in nasal associated lymphoid tissues from MALP-2 treated mice. Taken together, the results demonstrated that the synthetic lipopeptide MALP-2 represents a very promising adjuvant for the mucosal delivery of vaccine antigens.

CC 15-2 (Immunochemistry)

STMycoplasma lipopeptide MALP2 adjuvant mucosal immunity

IT CD antiqens

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (CD54; up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Histocompatibility antigens

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (H-2, class I; up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Cell adhesion molecules

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-1 (intercellular adhesion mol. 1); up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgA; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG1; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG2a; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG2b; mucosal adjuvant activity of synthetic Mycoplasma-derived

lipopeptide MALP-2) IT Antibodies and Immunoglobulins RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG3; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) IT T cell (lymphocyte) (helper cell/inducer, TH2; synthetic Mycoplasma-derived lipopeptide MALP-2 enhances immune response by) IT Interleukin 10 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal expression in response to synthetic Mycoplasma-derived lipopeptide MALP-2) IT Immunization (mucosal; adjuvant activity of synthetic Mycoplasma-derived lipopeptide IT Macrophage Monocyte (stimulation in mucosal lymphoid tissue by synthetic Mycoplasma-derived lipopeptide MALP-2) IT Lung Vagina (synthetic Mycoplasma-derived lipopeptide MALP-2 enhances IgA response IT Vaccines (synthetic; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2 in relation to) IT CD80 (antigen) RL: BSU (Biological study, unclassified); BIOL (Biological study) (up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2) IT 250718-44-6, MALP-2 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) TТ 250718-44-6, MALP-2 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) 250718-44-6 HCAPLUS RN CN L-Lysine, S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L $asparaginyl-L-asparaginyl-L-\alpha-aspartyl-L-\alpha-glutamyl-L-seryl-L-\\$ $asparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L-\alpha-glutamyl-phenylalanyl-L-lysyl-L-\alpha-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-phenylalanyl-L-lysyl-L-a-glutamyl-phenylalanyl-phenyl$ (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

— (CH₂) 14

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:557379 HCAPLUS Full-text

DOCUMENT NUMBER:

135:256104

TITLE:

Discrimination of bacterial lipoproteins by Toll-like

receptor 6

AUTHOR(S):

Takeuchi, Osamu; Kawai, Taro; Muhlradt, Peter

F.; Morr, Michael; Radolf, Justin D.;

Zychlinsky, Arturo; Takeda, Kiyoshi; Akira, Shizuo

CORPORATE SOURCE:

Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, and Core

Research for Evolutional Science and Technology (CREST) of Japan Science and Technology Corp., Suita, 565-0871, Japan International Immunology (2001), 13(7), 933-940 CODEN: INIMEN; ISSN: 0953-8178 Oxford University Press Journal English Bacterial lipoproteins (BLP) trigger immune responses via Toll-like receptor 2 (TLR2) and their immunostimulatory properties are attributed to the presence of a lipoylated N-terminus. Most BLP are triacylated at the N-terminus cysteine residue, but mycoplasmal macrophage-activating lipopeptide-2 kDa (MALP-2) is only diacylated. Here the authors show that TLR6-deficient (TLR6-/-) cells are unresponsive to MALP-2 but retain their normal responses to lipopeptides of other bacterial origins. Reconstitution expts. in TLR2-/-TLR6-/- embryonic fibroblasts reveal that co-expression of TLR2 and TLR6 is absolutely required for MALP-2 responsiveness. Taken together, these results show that TLR6 recognizes MALP-2 cooperatively with TLR2, and appears to discriminate between the N-terminal lipoylated structures of MALP-2 and lipopeptides derived from other bacteria. 15-10 (Immunochemistry) bacteria lipoprotein Toll receptor 6 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (MALP-2 (macrophage-activating lipopeptide-2); Toll-like receptor-6 mediates recognition of) Transcription factors RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (NF-κB (nuclear factor κB); activation in Toll-like receptor-6 signaling) RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (TLR-2 (Toll-like receptor-2); cooperation with TLR6 in recognition of diacylated lipopeptides) RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (TLR-6 (Toll-like receptor-6); in recognition of diacylated

lipopeptides) IT Borrelia burgdorferi Salmonella minnesota

Lipopeptides

Receptors

Receptors

Staphylococcus aureus

Treponema pallidum

(Toll-like receptor-6 mediates recognition of diacylated lipopeptides)

ITLipopeptides

SOURCE:

PUBLISHER:

LANGUAGE:

AB

CC

ST IT

IT

IT

DOCUMENT TYPE:

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(diacylated; Toll-like receptor-6 mediates recognition of)

IT Signal transduction, biological

(for Toll-like receptor-6 in recognition of diacylated lipopeptides)

IT 289898-51-7, Jun N-terminal kinase 1

> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(activation in Toll-like receptor-6 signaling)

IT 289898-51-7, Jun N-terminal kinase 1

> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(activation in Toll-like receptor-6 signaling)

289898-51-7 HCAPLUS RN

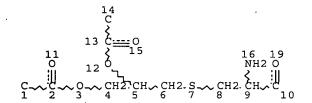
Kinase (phosphorylating), gene c-jun protein N-terminal, 1 (9CI) (CA CN INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SEARCH IN CAPLUS AND USPATFULL

=> d que stat 121 · L11 STF



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

STR

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L13 184 SEA

184 SEA FILE=REGISTRY SSS FUL L11

L16

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L17 7 SEA FILE=REGISTRY SUB=L13 SSS FUL L16

L18 10 SEA FILE=HCAPLUS ABB=ON L17

L19 5 SEA FILE=HCAPLUS ABB=ON L18 AND (PRD<20020719 OR PD<20020719)

L20 2 SEA FILE-USPATFULL ABB-ON L18 AND (PRD<20020719 OR PD<20020719

L21 6 DUP REMOV L19 L20 (1 DUPLICATE REMOVED)

=> d ibib abs hitstr 121 1-6

L21 ANSWER 1 OF 6 USPATFULL on STN

ACCESSION NUMBER: 2005:318074 USPATFULL Full-text

TITLE:

Use of a lipopeptide or lipoprotein as an adjuvant in

therapeutic or prophylactic vaccinations

INVENTOR(S):

Muhlradt, Peter, Braunschweig, GERMANY, FEDERAL

REPUBLIC OF

Guzman, Carlos Alberto, Wolfenbuttel/Deutschland,

GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
			,	
PATENT INFORMATION:	US 2005276813	A1	20051215	
APPLICATION INFO.:	US 2003-509917	A1	20030403	(10)
	WO 2003-EP3497		20030403	
			20041004	PCT 371 date

NUMBER DATE

PRIORITY INFORMATION:

EP 2002-7640 20020404

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

WHITHAM, CURTIS & CHRISTOFFERSON, P.C., 11491 SUNSET

HILLS ROAD, SUITE 340, RESTON, VA, 20190, US

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 11

NUMBER OF DRAWINGS:

12 Drawing Page(s)

LINE COUNT:

1105

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ

Disclosed is the use of lipopeptides and lipoproteins as mucosal adjuvants for various vaccinations via mucous membranes, particularly intranasally. Said lipopeptides represent peptides or proteins substituted with 2,3-diacyloxy(2R)-propyl at the amino-terminal cystein of a peptide or protein, preferably S-(2,3-bispalmitoyloxy-(2R)- propyl)cysteinyl peptides derived from mycoplasmas. Said peptides are highly effective even in small doses, produce good immunization results, and increase the IgA level, among others.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 143405-67-8D, peptide conjugates

(vaccine comprising an antigen and lipopeptide or lipoprotein as mucosal adjuvant for stimulation of T-cells and Igs)

RN 143405-67-8 USPATFULL

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L21 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:818310 HCAPLUS Full-text

DOCUMENT NUMBER:

139:306533

TITLE:

Use of a lipopeptide or lipoprotein as an adjuvant in

therapeutic or prophylactic vaccinations Guzman, Carlos Alberto; Muehlradt, Peter

PATENT ASSIGNEE(S): GBF Gesellschaft fuer Biotechnologische Forschung

m.b.H., Germany

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT NO			KINI		DATE		2	APPL:		ION 1			Di	ATE		
	2003084			A2		2003		,						2	00304	103 <-	-
	W: AI CC GN LS PI TZ RW: GI	E, AG, D, CR, M, HR, G, LT, H, PL, Z, UA,	AL, CU, HU, LU, PT, UG, KE,	AM, CZ, ID, LV, RO, US, LS,	AT, DE, IL, MA, RU, UZ, MW,	AU, DK, IN, MD, SC, VC, MZ,	AZ, DM, IS, MG, SD, VN, SD,	DZ, JP, MK, SE, YU, SL,	EC, KE, MN, SG, ZA, SZ,	EE, KG, MW, SK, ZM, TZ,	ES, KP, MX, SL, ZW UG,	FI, KR, MZ, TJ,	GB, KZ, NI, TM,	GD, LC, NO, TN,	GE, LK, NZ, TR,	GH, LR, OM, TT,	
	В	FR, FR,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	2480196															103 <- 103 <-	
	1490106															103 <-	
	R: A		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,		
US PRIORITY	2005276	813		Al		2005	1215		JS 2	004-9 002-	5099: 7640	17	i	2 A 2	00410 00204	004 <- 104 <- 103	

AB Disclosed is the use of lipopeptides and lipoproteins as mucosal adjuvants for various vaccinations via mucous membranes, particularly intranasally. Said lipopeptides represent peptides or proteins substituted with 2,3-diacyloxy(2R)-Pr at the amino-terminal cysteine of a peptide or protein, preferably S-(2,3-bispalmitoyloxy-(2R)-propyl)cysteinyl peptides derived from mycoplasmas. Said peptides are highly effective even in small doses, produce good immunization results, and increase the IgA level, among others. The lipopeptides stimulate both Th1 and Th2 cells and IgG and IgA responses to an antigen.

IT 143405-67-8D, peptide conjugates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vaccine comprising an antigen and lipopeptide or lipoprotein as mucosal adjuvant for stimulation of T-cells and Igs)

RN 143405-67-8 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH}_2 \\ & \text{HO}_2\text{C} \\ & \text{NH}_2 \\ & \text{Me} \end{array} \begin{array}{c} \text{O} \\ & \text{CH}_2 \end{array}) \begin{array}{c} \text{NH}_2 \\ & \text{O} \\ & \text{CH}_2 \end{array}) \begin{array}{c} \text{Me} \\ & \text{O} \end{array}$$

L21 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

1997:15525 HCAPLUS Full-text

DOCUMENT NUMBER:

126:73781

TITLE:

Multiple antiqueic peptide system having adjuvant

properties for use in vaccines

INVENTOR(S):

Tam, James P.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 24 pp., Cont. of U.S. Ser. No.

877,613, abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				,
US 5580563	Α	19961203	US 1994-331489	19941228 <
WO 9322343	Al	19931111	WO 1993-US4179	19930503 <
W: CA, JP, US	•			
RW AT BE CH	DE DI	ES FR G	B GR TE TT LU MC	NI PT SE

PRIORITY APPLN. INFO.: US 1992-877613 B2 19920501 <--WO 1993-US4179 W 19930503 <--

AB A multiple antiquenic peptide system is disclosed that comprises a dendritic core and peptides and a lipophilic anchoring moiety. This peptide system is capable of eliciting an immune response when injected into a mammal; vaccines prepared from the system and methods of use including therapeutic protocols are included. This combination eliminates the need for the inclusion of adjuvants found to be toxic to humans, and facilitates the exponential amplification of the antigenic potential of a vaccine prepared therefrom, as noncovalent amplification by a liposome or micellar form is possible. Further, multiple different antigenic peptides may be attached so that the system may be prepared for administration to concurrently treat diverse ailments, e.g. AIDS and influenza. Thus, 4 copies of a 24-residue peptide (designated B1) of the V3 loop of HIV-1 gpl20 were linked to the free $N\alpha$ and Nε positions of Nα, Nε-dilysyl-Lys-Ser-Ser-[Nε-(tripalmitoyl-Sglycerylcysteinyl)]lysyl-alanine, and the product was incorporated into liposomes which were used to immunize mice. The immunized mice showed a hightiter humoral antibody response, a mitogenic response in spleen cells, a CD4+ T-helper cell response, a cytotoxic T-lymphocyte response, and formation of IL-2 by spleen cells after restimulation.

IT 155382-51-7DP, conjugates with peptides

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(multiple antigenic peptide system having adjuvant properties for use in vaccines)

RN 155382-51-7 HCAPLUS

CN Hexadecanoic acid, 1-[[(2-amino-2-carboxyethyl)thio]methyl]-1,2-ethanediyl

$$\begin{array}{c} \text{NH2} \\ \text{HO}_2\text{C}-\text{CH}-\text{CH}_2-\text{S}-\text{CH}_2 \\ \text{Me}-\text{(CH2)}_14-\text{C}-\text{O}-\text{CH2}-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{(CH2)}_14-\text{Me} \end{array}$$

L21 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:455886 HCAPLUS Full-text

DOCUMENT NUMBER:

121:55886

TITLE:

Dendritic conjugates of lipids with multiple peptide

ADDITCATION NO

חאיתים

antiqens for use as adjuvants and in vaccines

INVENTOR(S):

Tam, James P.

PATENT ASSIGNEE(S):

Rockefeller University, USA

SOURCE:

PCT Int. Appl., 55 pp.

רא תובי

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT:

English

VIND

PATENT INFORMATION:

DATENT NO

FAIBNI NO.		KIND	DAIL	AFFLICATION NO.	DATE
WO 9322343		A1	19931111	WO 1993-US4179	19930503 <
W: CA	, JP, US				
RW: AT	, BE, CH,	DE, DK	, ES, FR, G	B, GR, IE, IT, LU, MO	C, NL, PT, SE
US 5580563		Α	19961203	US 1994-331489	19941228 <
PRIORITY APPLN.	INFO.:			US 1992-877613	A2 19920501 <

WO 1993-US4179 W 19930503 <--AB A multiple antigenic peptide system with a dendritic core, multiple peptides and a lipophilic anchoring moiety is described. This combination eliminates the need for adjuvants found to be toxic to humans, and facilitates the exponential amplification of the antigenic potential of a vaccine prepared from it, as noncovalent amplification by a liposome or micellar form is possible. Multiple different antiquenic peptides may be attached so that the system may be used to concurrently treat multiple diseases, e.g., AIDS and influenza. Humoral and T-cell epitopes may be present in the same conjugate. The present multiple antigen peptide system is capable of eliciting an immune response when injected into a mammal. Lysyl tripalmitoyl-S-glyceryl cysteine (Lys(P3C)) was conjugated with resin immobilized Fmoc-Ala and the tetrabranching peptide [Fmoc-Lys(Fmoc)]2-Lys-Ser-Ser-Lys(P3C)-Ala immobilized on resin and the B1 epitope of the V3 loop of gp120 of HIV-1 synthesized by Fmoc chemical using Arg(Pmc) and Asn(Trt). The conjugates were incorporated into egg lecithin/cholesterol/stearylamine liposomes and injected into mice and guinea pigs (100 µg protein on days 0 and 14 and 50 µg on days 30 and 45) and the antisera characterized. Antibody titers from animals immunized with the dendritic peptide were .apprx.2-fold higher than those from animals immunized with gpl20 with 90% fusion inhibition titers of 4.3-10+103.

IT 155382-51-7

> RL: RCT (Reactant); RACT (Reactant or reagent) (reactions of, in preparation dendritic peptide conjugates for use as adjuvants and vaccines)

RN 155382-51-7 HCAPLUS

CN Hexadecanoic acid, 1-[[(2-amino-2-carboxyethyl)thio]methyl]-1,2-ethanediyl

$$\begin{array}{c} \text{NH2} \\ \text{HO}_2\text{C}-\text{CH}-\text{CH}_2-\text{S}-\text{CH}_2 & \text{O} \\ \text{Me}-\text{(CH}_2)_{14}-\text{C}-\text{O}-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{(CH}_2)_{14}-\text{Me} \\ \\ \parallel \\ \end{array}$$

L21 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:534761 HCAPLUS Full-text

DOCUMENT NUMBER:

121:134761

TITLE:

Synthesis and mitogenic activity of chiral lipopeptide

WS1279 and its derivatives

AUTHOR(S):

Kurimura, Muneaki; Ochiai, Akiko; Achiwa, Kazuo

CORPORATE SOURCE:

Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (1993),

41(11), 1965-70

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Optically active lipopeptide derivs. have been synthesized by the use of chiral glycerol derivs. Lipopeptide WS1279 derivs. with (R)-glycerol moieties showed a higher mitogenic activity than those with (S)-configuration. Various N-protected lipopeptide and N-deprotected derivs. showed increased mitogenic activity (no data).

IT 143405-85-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and acidic deblocking of)

RN 143405-85-0 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-3-(1,1-dimethylethoxy)-3-oxopropyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$t-BuO$$
 NH_2
 O
 $CH_2)$
 14
 O
 Me
 $CH_2)$
 14
 O

IT 143405-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 143405-67-8 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NH}_2 \\ \text{HO}_2\text{C} \\ \text{Me} \end{array} \begin{array}{c} \text{S} \\ \text{O} \\ \text{(CH}_2) \\ \text{14} \end{array} \begin{array}{c} \text{Me} \\ \text{(CH}_2) \\ \text{14} \end{array}$$

L21 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1992:551315 HCAPLUS Full-text

DOCUMENT NUMBER:

CORPORATE SOURCE:

117:151315

TITLE:

Stereospecific synthesis and mitogenic activity of

lipopeptide WS1279 and its derivatives

AUTHOR(S):

Kurimura, Muneaki; Ochiai, Akiko; Achiwa, Kazuo Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, Japan

SOURCE:

Peptide Chemistry (1992), Volume Date 1991,

29th, 361-6

CODEN: PECHDP; ISSN: 0388-3698

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 117:151315

GI

AB The stereospecific synthesis of title lipopeptides I [R1 = palmitoyl, R2 = Asn-Ser-Gly-Gly-Ser-OH; R1 = H, Cl3CCH2O2C (Troc), R2 = Asn-Ser-Gly-Gly-Ser-OH, Asn-Ser-Gly-Gly-OH, Asn-Ser-Gly-OH, Asn-Ser-OH, Asn-OH, OH] and II (R1 = palmitoyl, Troc, H) is described. Thus, cysteine derivative III (R3 = CMe3) was de-tert-butylated by CF3CO2H to give III (R3 = H), which was coupled with H-Asn-Ser(CMe3)-Gly-Ser(CMe3)-OCMe3 by DEPC in the presence of Et3N in DMF to give 78% lipopeptide IV (R4 = Troc). The latter was Troc-deblocked by Zn/HOAc to give 80% IV (R4 = H), which was acylated with palmitoyl chloride in the presence diisopropylethylamine and DMAP in CH2Cl2 to give 72% IV (R4 = palmitoyl), which was deblocked by CF3CO2H to give 75% I (R1 = palmitoyl, R2 = Asn-Ser-Gly-Gly-Ser-OH). The relationship between structure and mitogenic activity was discussed for the lipopeptides I.

IT 143405-85-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and deblocking of)

RN 143405-85-0 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-3-(1,1-dimethylethoxy)-3-oxopropyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 143405-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and mitogenic activity of)

RN 143405-67-8 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NH}_2 \\ \text{HO}_2\text{C} \\ \text{R} \\ \text{O} \\ \text{R} \\ \text{O} \\ \text{CH}_2) \\ \text{14} \end{array} \begin{array}{c} \text{NH}_2 \\ \text{O} \\ \text{CH}_2) \\ \text{14} \end{array}$$